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ABSTRACT

This document contains two issues of the ERIC Clearinghouse on Information and Technology (ERIC/IT) serial publication, "Update." Each issue includes feature articles; ERIC/IT News; information about new books published in cooperation with ERIC/IT; abstracts of new ERIC Digests, with links to full-text versions of the Digests; a subscription form; and contact information. The feature article in the November 2002 (Volume 23, Number 1) issue is "AskERIC Celebrates Its 10th Anniversary" (by Colleen Seabury). "Virtual Museum Projects in Native America" (by Mark Christal, Paul Resta, and Loriene Roy) is the feature article in the December 2002 issue (Volume 23, Number 2). (AEF)

## ERIC/IT Update, 2002

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November 2002 Volume 23, Issue 1

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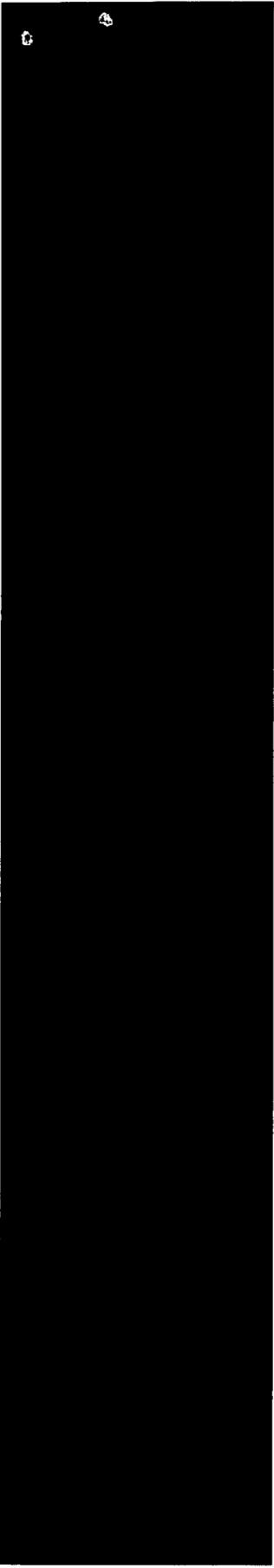
### AskERIC Celebrates Its 10th Anniversary

By Colleen Seabury, Digital Reference Specialist, AskERIC

"Got an Education Question?" The first educational site registered on the World Wide Web, AskERIC ([www.askeric.org](http://www.askeric.org)) will be celebrating its 10<sup>th</sup> anniversary in November 2002. A special project of the ERIC Clearinghouse on Information & Technology, AskERIC has been providing education information with a "personal touch" by connecting users with resources related to educational theory and practice for the past decade. Through its Question-Answering Service, AskERIC has responded to over *one quarter of a million* e-mail questions, sent in by individuals from all over the United States and the world. In response to users' requests for information, the AskERIC Web site has grown to include a Resource Collection with over 3000 educational links, access to the ERIC Database, a lesson plan collection, a question archive, a mailing list archive, and a monthly newsletter. The AskERIC Web site currently averages over 117,000 visitors per week and has received over four million visitors (and over one quarter of a billion hits) to date this year alone.

Through the AskERIC Question-Answering Service, users can tap into the expertise of specialists from all 16 ERIC Clearinghouses. Anyone looking for information about an educational topic (e.g., educational research, teaching methods, education statistics, assessment, special education, technology integration) can submit a question to AskERIC. Users can ask a question by completing a question submission form on the AskERIC site or by sending an e-mail message to [askeric@askeric.org](mailto:askeric@askeric.org). Once received, all questions are sorted by topic and distributed to clearinghouses and support components in the ERIC system. Usually within two business days, an ERIC Expert replies to the user with resources that may include citations from the ERIC Database, Web sites, discussion groups, and organizations. Most responses also contain the search strategies used to locate the resources so that users can conduct further searches on their own.

How did the idea for AskERIC originate? Bob Stonehill, former director of the ERIC System, said it best. "The idea for AskERIC came from Mike Eisenberg, former director of the ERIC Clearinghouse on Information & Technology at Syracuse University and his colleagues Nancy Preston and David Lankes. They toyed with the idea of an *Electronic Librarian*, but it wasn't really an electronic librarian. It was a live human being at the end of an e-mail message who would do whatever it took to provide the response. It was a way of building support for the Internet and for Internet applications."

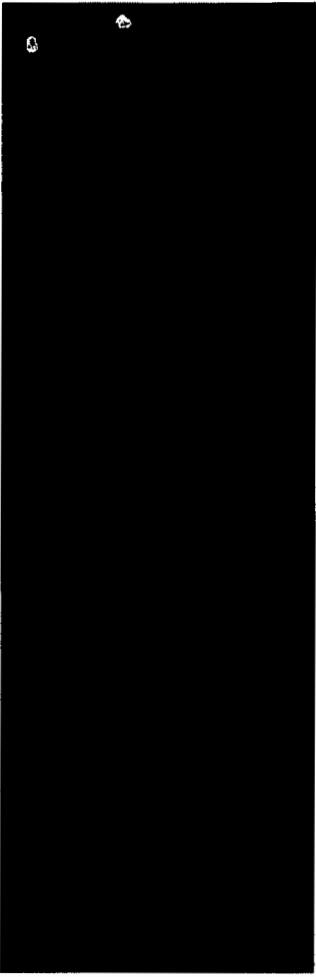


For many users, AskERIC was their first experience in using the Internet to retrieve information. The AskERIC Gopher site debuted in February 1993, serving as a free electronic library. Some of the resources available on the Gopher site included the e-mail Question-Answering Service, ERIC Digests, ERIC Monographs, InfoGuides, and Lesson Plans. In December of that year, the AskERIC Virtual Library was launched as one of the first 100 Web sites in existence. Three months later, the AskERIC site was reorganized into the AskERIC Virtual Library. With this reorganization, users could now access the ERIC Database through the AskERIC site. During this time, AskERIC received two notable honors: AskERIC was a finalist for the 1994 Computerworld Smithsonian Award in Education and Academia, and in 1995 GNN Communications named AskERIC as the best professional K-12 education site. AskERIC continued to add resources and change its look over the next few years, with redesigns of the Web site in 1996 and 2001.

AskERIC has prided itself on providing Web content to assist educators in their classroom practice. A popular section of the Web site is the AskERIC Lesson Plan collection, which contains over 2000 lessons submitted by teachers, librarians, and postsecondary students. The lesson plans are organized into 13 main subject areas and include activities for preschool, K-12, and higher education. Some lesson plans contain teacher-created handouts available in .pdf format. Since 1998, a Web-based lesson plan submission form has been in place to help streamline the process used for cataloging lessons with GEM (another U.S. Department of Education project) metadata. The AskERIC Lesson Plan collection continues to grow with new lesson plans added every month.

In addition to the Lesson Plan collection, the AskERIC site contains a Question Archive and a Mailing List Archive. Added in August 2000, the Question Archive contains over 150 sample responses to frequently asked questions received by the AskERIC Question-Answering Service. Each sample response in the Question Archive includes resources that a user would receive from an *ERIC Expert* (e.g., citations from the ERIC Database, Web sites, discussion groups, and organizations). Sample responses include the following: "Do you have any resources on classroom management?", "How can school counselors positively impact academic achievement?", and "What are some tips and techniques for teaching distance education classes?" In addition to the Question Archive, AskERIC keeps a searchable archive of over 25 educational mailing lists. Having a searchable archive allows users to browse through past discussions. At times, users might find it helpful to post a question to a discussion group to ask colleagues for opinions and advice. Both the Question Archive and the Mailing List Archive serve as useful tools for locating introductory information on educational topics.

When the AskERIC site was redesigned in January 2001, additional Web content was added. Along with a new look, over 3000 links to educational resources were added to the site, forming the AskERIC Resource Collection. Links to these resources, which include Internet sites, discussion groups, and organizations, can be found on the homepage. A monthly AskERIC Update Newsletter was also added to the site, keeping users informed of new additions to the Lesson Plan collection, Resource Collection, and Question Archive. The



newsletter also features helpful tips for searching the ERIC Database on the AskERIC site. The most recent addition to the AskERIC site is a real-time reference service. Through AskERIC Live!, users can receive searching assistance by "chatting" online with a librarian (i.e. an ERIC reference specialist). This venue provides a direct way for users to receive assistance when they are searching the ERIC Database or the AskERIC web site.

AskERIC has experienced many exciting changes during the past 10 years and is always looking for ways to adapt its services and Web content to meet the needs of the education community. AskERIC looks forward to expanding its resources during the next decade, with a continued emphasis on providing high quality education information with a *personal touch*.

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### ERIC/IT Publication Chosen as a Scout Report Selection

*ERIC Web Links 2001/2002: Internet Resources for Children* was chosen as a Scout Report Selection in the January 25, 2002 issue. The Scout Report, a weekly current awareness publication that highlights new and newly discovered Internet Resources, is sponsored by NSF and Mellon. The Scout Report takes care to cover only the most useful resources, considering the depth of content, the authority of the source, and how well the information is maintained and presented.

In addition, hundreds of schools and public libraries are linked to it from their own Web sites, and tens of thousands of teachers, parents, and students from around the country are using it.

#### New!

### [ERIC Web Links 2002/2003: Internet Resources for Children and Teens](#) (PDF Version)

Building upon last year's publication, ERIC Web Links 2002/2003 describes and links to over 50 additional Web sites for children and teens in grades 3-12 that are both fun and educational. Published in time for the start of the new, 2002/2003 school year, this is a great resource for teachers, librarians, parents, and kids for exploring the core curriculum of math, science, language arts, and history/social studies, as well as art, health, media/information literacy, and music. It is available in both an html version with direct links, which is great for bookmarking, and a 3-page pdf version for ease in printing and photocopying.

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### ERIC/IT's Newsletter Now Available from Your PDA!

By Jane Janis, Systems Coordinator, ERIC/IT

You're away from the office, you're not at home and you have a few extra minutes. This is just the right time to catch up on the latest news from the ERIC/IT Clearinghouse. In our continuing effort to disseminate educational information, we have created another format for the ERICIT newsletter. You can now download the newsletter to your Personal Digital Assistant (PDA). Any PDA (Windows CE, Pocket PC, or Palm device) that can access Avantgo.com via the Internet can create a custom channel to download the ERIC Clearinghouse on Information and Technology's newsletter.

To become an Avantgo member at no charge, go to Avantgo.com and click the New Member Sign up button on the middle right side of the page. It will then take you to page where the Avantgo software can be downloaded to your PDA. Make sure you have met the minimum requirements for installation.

Once you are an Avantgo member, go to [avantgo.com](http://avantgo.com) in your web browser and sign into your account.

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[http://ericit.org/newsletter/pda/articles\\_pda.shtml](http://ericit.org/newsletter/pda/articles_pda.shtml)

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Trends in Educational Technology

Fifth Edition

Educational Media and Technology Yearbook

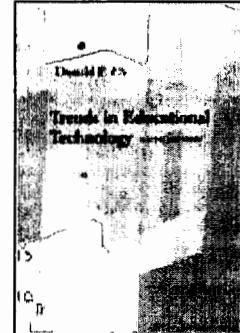
2002 Volume 27

### **Trends in Educational Technology**

*Fifth Edition*

Donald P. Ely

Written by a leading authority in the field, this book provides an overview of current applications of technology in education. While emphasizing distributed learning systems, distance education, and wireless technology, the author also offers the latest information and statistics regarding the explosive growth of computer and Internet access and use at school and at home, increased advocacy for educational technology, new opportunities for professional development for teachers, new uses for television and video, and the role of technology in education reform. Readers will gain a deeper understanding of these forces, which are helping to shape the education of our nation, young and the old, from the classroom to the living room.



This new edition of *Trends in Educational Technology* will be of interest to instructional designers, technology-based support staff, school library media specialists, teachers and teacher educators, as well as administrators in primary, secondary and higher education.

**Donald P. Ely** is Professor Emeritus, Department of Instructional Design, Development and Evaluation at Syracuse University's School of Education and Founding Director of the ERIC Clearinghouse on Information & Technology at Syracuse University. He is currently Visiting Professor, Instructional Systems Design, at Florida State University. He has written or edited numerous books over the course of his five decades in the field of educational technology, including *Educational Media and Technology Yearbook*, *Classic Writings on Instructional Technology*, *The International Encyclopedia of Educational Technology, Second Edition*, and the first four editions of this volume.

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**Educational Media and Technology Yearbook**

**2002 Volume 27**

Edited by Mary Ann Fitzgerald, Michael Orey, and Robert Maribe Branch

"In the year 2001, we noted several trends in the field, some new, and others continuing from recent years. The international surge toward online education or "e-learning" continues to gain momentum. Instructional technology projects and initiatives continue to emphasize the themes of collaboration and integration. The interdisciplinary nature of this field seems to be broadening, and the borders between instructional technology, information science, and educational media, and information technology are becoming increasingly blurred.

Among K-12 and higher education leaders, tension between the standards reform movement and the constructivist philosophy remains, and the debate over this issue has many implications for our field. In broader contexts, experiential education seems to be gaining importance, and designers are applying emerging technologies to create learning environments that stimulate authentic situations. Finally, over the last few years we have witnessed a changing of the guard as many prominent leaders in the field of instructional technology have retired. These developments and trends are represented in the Yearbook in the form of research studies, descriptive reports, and conceptual pieces."

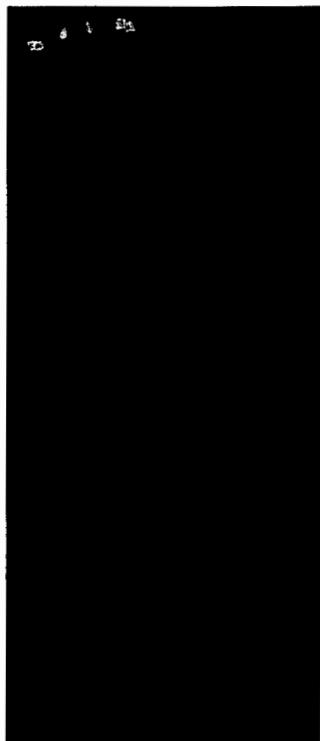
*—From the Preface*

Exploring current issues each year for more than a last quarter of a century, this annual volume helps media and technology professionals keep abreast of a changing and expanding field. With this 27<sup>th</sup> volume, readers will learn of the latest trends and issues, exciting projects unfolding at several research laboratories, issues of particular relevance to K-12 education, and the careers of some instructional technology leaders. And, as always, this volume provides directories of instructional technology-related organizations and institutes of higher learning offering degrees in related fields as well as an annotated list of selected current publication related to the field.

See Table of Contents

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### **How People Learn (and What Technology Might Have to Do with It)**

By Marcy P. Driscoll

This new Digest provides the latest research/knowledge on how people learn and its implications for using technology in the classroom. The author is Professor and Chair of Educational Psychology and Learning Systems at Florida State University, Past-President of the Association for Educational Communications & Technology (AECT), and the author or co-author of 7 books related to this topic.

### **Learning and Teaching Information Technology: Computer Skills in Context**

By Michael B. Eisenberg and Doug Johnson

Learn how technology literacy skills can fit within an information literacy skills context. Revised and updated from the authors' popular 1996 Digest. Michael Eisenberg is Dean and Professor at the University of Washington Information School, and Doug Johnson is Director of Media and Technology at the Mankato Public Schools in Mankato, Minnesota.

### **Advancing Your Library's Web-Based Services**

By Sari Feldman and Tracy Strobel

The Deputy Director and Web Applications Supervisor of one of the largest public libraries in the country share their valuable tips for successfully developing your library's Web presence in the areas of circulation, reference services, services for young people, and readers' advisory.

### **Knowledge Management in Instructional Design**

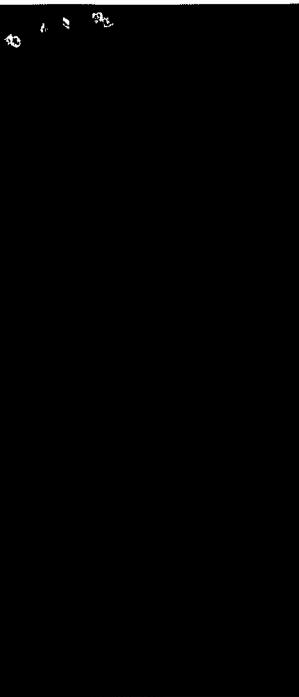
By J. Michael Spector and Gerald S. Edmonds

Knowledge management tools and systems are beginning to be used for the design and development of instructional systems and learning environments, and instructional design practice is changing as a consequence. Read this new digest on one of the hottest new topics in the field of instructional design.

### **Information Literacy Instruction in Higher Education: Trends and Issues**

By Abby Kasowitz-Scheer and Michael Pasqualoni

This ERIC Digest examines characteristics of successful programs, presents several different approaches academic libraries are currently taking to support information literacy instruction, and addresses common challenges in developing and maintaining such programs.

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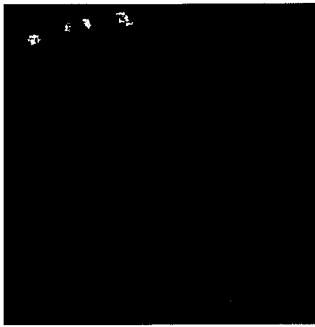
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December 2002 Volume 23, Issue 2

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### **Virtual Museum Projects in Native America**

By Mark Christal, Paul Resta, and Loriene Roy

The University of Texas at Austin

The Four Directions project ([www.4directions.org](http://www.4directions.org)), funded by a federal Challenge Grant, worked with 19 American Indian schools in 10 states to promote the use of technology for the purpose of creating and delivering culturally responsive curriculum. The Four Directions helped these schools to develop technology-supported curricula and learning activities that were thematic and interdisciplinary, connecting the values and traditions of these diverse cultures with core academic standards. One of initiatives of the project was the production of virtual museums of native culture, which uses Web page authoring, multimedia production, and new media such a QuickTime Virtual Reality (QTVR).

Because of historical circumstances, much of what remains of American Indian material culture resides in museums across the nation and in private collections. The virtual museum projects in the Four Directions schools used digital photography and QuickTime Virtual Reality to "digitally repatriate" Native artifacts for use in the schools' culturally responsive curricula and to share with the world on the World Wide Web. QTVR is a photography-based "immersive imaging technology" that enables a user to explore panoramic spaces and examine objects by rotating them to any viewpoint using a computer mouse. Special regions on the QTVR movies called "hot spots" trigger various actions when clicked on, such as picking up a virtual object out of a virtual panoramic space, bringing up detailed views of parts of an object, or displaying a Web page of information about the object or panorama.

The Four Directions project also trained students and teachers in oral history techniques, audio recording skills, and digital audio technology that enabled students to make valuable records of the wisdom and memories of tribal elders.

With the assistance of the Four Directions project, several schools developed virtual museums. The Smithsonian Institute's National Museum of the American Indian (NMAI) in New York City and the Heard Museum in Phoenix, Arizona were partners in the Four Directions project, and have collaborated in the production of Native American virtual museums. Three Four Directions schools sent teams of students, teachers, and community members to produce a virtual tour of the NMAI exhibitions from the perspective of Native American children. This virtual tour is accessible on the World Wide Web at

<http://www.conexus.si.edu/VRTour>.

The Heard Museum collaborated with three Four Directions schools to produce cultural content for school learning projects. Teachers at Seba Dalkai and Dilcon, sister Navajo schools in Arizona, used the media students created at the Heard Museum, along with digital audio and video of community members, to create HyperStudio stacks that illustrated the history of the schools.

With help from the Four Directions project, other schools have embarked on virtual museum projects in partnerships with museums in their regions that have substantial collections of culturally relevant items.

Throughout these various virtual museum projects a model has been emerging that combines authentic learning projects, culturally responsive pedagogy, and collaboration between museums and schools. This "Four Directions Model of Virtual Museum Projects" consists of three interacting and over-lapping components.

1. **Cultural Responsive Teaching:** Virtual museum projects are culturally responsive, because they teach to and through the culture of the child and bring community concerns and values to the center of the teaching-learning process. Students are motivated to excel because they are doing important, authentic work to recover and preserve their heritage. They gain from the knowledge of museum professionals and the wisdom of community elders. They develop skills in research, writing, social studies, science, mathematics, information literacy, and twenty-first century information technology.
2. **Cultural Revitalization:** A common concern among Native American peoples is the recovery and preservation of cultures and languages. Much of what remains of traditional material cultures resides in museum collections far from Native American communities. Virtual museum projects provide a way for communities to "digitally repatriate" precious items of cultural heritage. In the Four Directions Model, virtual museum activities also take place in the Native American communities, where students research and record local materials that supplement the museum's resources for the virtual museum. Local resources such as oral histories, cherished heirlooms, traditional stories, dances, and songs, native language and contemporary arts get combined with museum materials to present the vision of a vital, living culture.
3. **Cultural Collaboration:** Museums exist to preserve heritage and educate the public, but Native Americans sometimes object to the way museum exhibitions appropriate cultural property. Native Americans want the public to have access to authentic knowledge of their histories and cultures, but they believe that some aspects of their cultures should not be shared with outsiders. Virtual museum collaborations provide a venue where thorny issues of cultural property rights may be addressed and protocols for cultural collaboration may be designed and levels of accessibility decided.

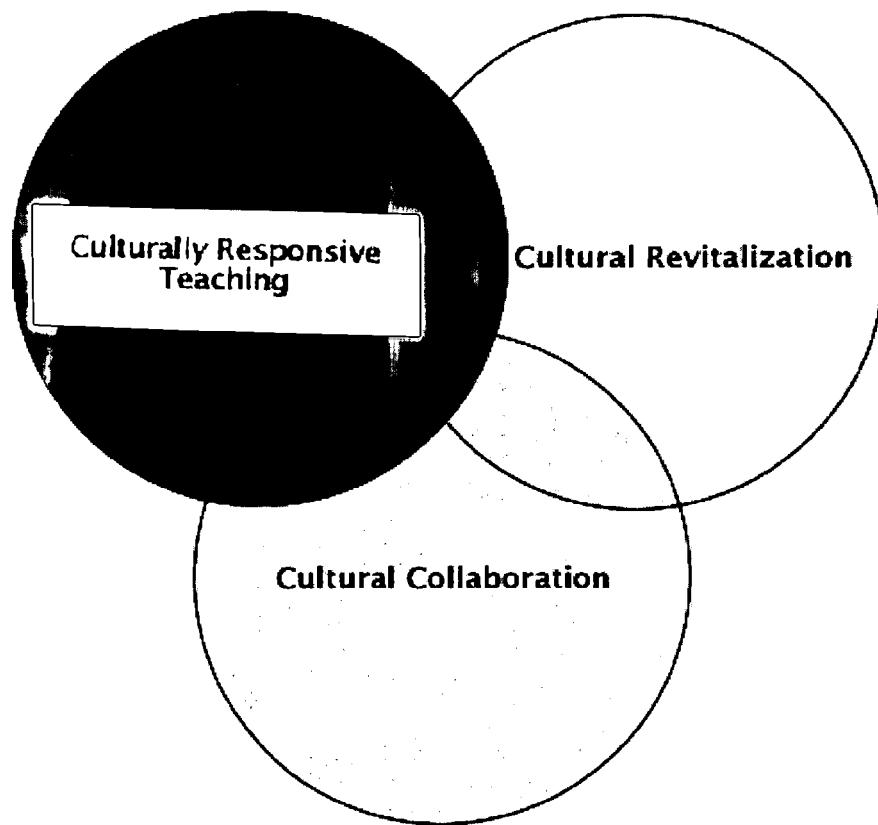


Figure 1: The Four Directions Model of Virtual Museum Projects

During the last year of the Four Directions project in 2001, Mark Christal conducted a doctoral case study of four virtual museum projects with five Four Directions schools and seven regional museums. The Four Directions Model proved to be a good general guide for planning and implementing those projects. His dissertation study will be published in the spring of 2003.

The National Museum of the American Indian has also been actively seeking out American Indian schools and colleges for virtual museum partnerships. Two such projects have been conducted at the museum's Cultural Resource Center near Washington D. C. in the past two years. The Four Directions and NMAI virtual museum projects are furthering the concept of virtual museum projects with American Indian students. The next logical step for this culturally responsive teaching strategy would be to adapt the practice to other student populations.

### Some Four Directions Virtual Museum Links

The Virtual Tour of the National Museum of the American Indian  
<http://www.conexus.si.edu/VRTour>

The Hannahville Indian Community School Virtual Museum  
<http://www.hvl.bia.edu/>

The Indian Township Passamaquoddy Virtual Museum

<http://4d.sped.ukans.edu/indiantownship/vmuseum/Index.htm>

The Indian Island Tribal School Virtual Museum

<http://www.iis.bia.edu/>

The Four Directions Project

<http://www.4directions.org>

The Seba Dalkai, Dilcon, and Pueblo Laguna virtual museum projects done with the Heard Museum are multimedia applications on CD-ROM, created with HyperStudio.

### **Supporting Research**

Culturally relevant teaching is a multicultural approach to teaching that has been developing over the past two decades. Two books that present much of the research and issues relevant to this approach are:

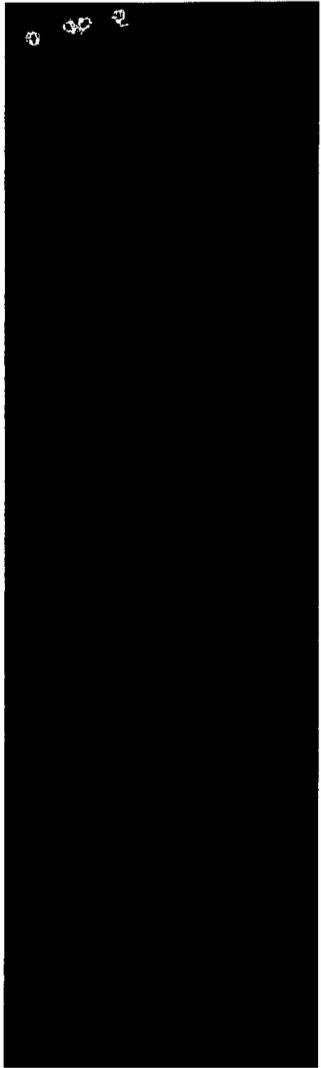
Gay, G. (2000). *Culturally responsive teaching: Theory, research, & practice*. New York: Teachers College Press. Hollins, E., King, J., & Hayman, W. (1994). *Teaching diverse populations: Formulating a knowledge base*. Albany, NY: State University of New York Press. See also, and earlier paper presented on the Four Directions virtual museum projects, available online:

Christal, M., Roy, L., Kreipe de Montaño, M., Resta, P., & Cherian, A. (2001). *Virtual museum collaborations for cultural revitalization: the four directions model*. Paper presented at the Museums & the Web Conference, Los Angles, CA, March 16-19, 2001. Available online:  
<http://www.archimuse.com/mw2001/papers/christal/christal.html>

### **About the Authors**

**Mr. Mark Christal**, currently Education Research Associate, University of Texas, Austin, is a doctoral candidate in Instructional Technology and an education researcher. He has been working on projects involving Computer Supported Collaborative Learning, educator professional development, and multimedia and learning projects on the Web since 1993. Through his involvement in the Four Directions project, he has trained hundreds of Native students and their educators from twenty reservations. He was awarded a Special Recognition of Outstanding Contribution from the Pueblo of Laguna in 1997. He is a co-author of Schools as Knowledge-Building Communities (Texas Center for Educational Technology) and author of an award-winning Web site for educators, QuickTime Virtual Reality for Educators and Just Plain Folk <http://www.edb.utexas.edu/teachnet/qtvr>.

**Dr. Paul Resta**, Founding President of the International Society for Technology in Education (ISTE), is the Principal Investigator for the Four Directions projects at the University of Texas. He holds the Ruth Knight Milliken Centennial Professorship in Education and is the Director of the Learning Technology Center at the University of Texas, Austin. Before coming to the University of Texas, he was a Professor of Learning and Training Technologies at the University of New Mexico, where he developed ENAN, the Educational Native American Network, a telecommunications network for Native American educational institutions. He chaired the Smithsonian Institution Off-Site Technology Center and the plan for extending the National Museum of the American Indian collections, archives and information resources to



Indian communities and the general public through technology. Among his many other credentials, he is the Founding President of ISTE.

**Dr. Loriene Roy**, Professor at the Graduate School of Library Information Science at the University of Texas, is an internationally known expert in Native American librarianship. She has served as President of the American Indian Library Association and as a Councilor-at-Large for the American Library Association. She is a member of other organizations, including the American Library Association, Association for Library Information Science Education, Oral History Association, Popular Culture Association, Public Library Association, and Worldcraft Circle of Native Writers and Storytellers. She has presented over 100 professional papers and has published more than sixty articles, chapters, reports, and documents and co-authored one book, *Library and Information Studies in the United States* (London: Mansell, 1998). She has experience in oral history project development, having organized a regional oral history project for the Arizona Historical Society, a statewide project for the Texas Library Association, and a national project for the Association for Library Service to Children. She is enrolled on the White Earth Reservation (Minnesota) and is a member of the Pembina Band of the Minnesota Chippewa Tribe.

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### AskERIC in the News

[Education World](#) reviewed AskERIC this month, calling it "**one of the greatest educator resources online!**"

Review: "For educators, this is the most famous lesson plan source on the Internet, and even those of us at Education World (we actually have more than 2,000 lesson plans ourselves!) can't argue with this reputation. But AskERIC isn't just a lesson plan site. Although there are over 1000 lesson plans here that have been submitted by teachers, it also contains a Question and Answer service with archives, a resource collection on every topic imaginable for educators, a mailing lists archive, and a seemingly endless database of education information. Lesson plans can be browsed by subject area or searched by keyword and grade level. Included in the lesson plan section is a guide for developing a lesson plan and guidelines for submitting your plans to ERIC along with a section featuring the latest plans. Ask an ERIC Expert offers a live chat with a librarian and a link for students to find homework help. The mountain of information in the database can be searched with a simple or advanced search and includes links to a thesaurus, information on citing materials, how to obtain full text and a list of the journals abstracted. This is a top-notch educator site that is celebrating its tenth year (!) on the Internet." For the full review, [click here](#).

AskERIC is a personalized Internet-based service providing education information to teachers, librarians, counselors, administrators, parents, and anyone interested in education throughout the United States and the world. It began in 1992 as a project of the [ERIC Clearinghouse on Information and Technology](#). Today, AskERIC encompasses the resources of the entire ERIC system and beyond, using the subject expertise of the 16 ERIC Clearinghouses to respond to requests for education information, which now number over 300,000.

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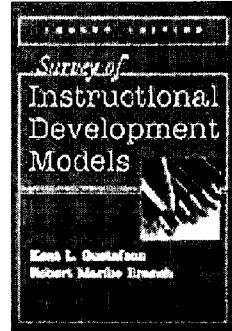
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### **Survey of Instructional Development Models**

*Fourth Edition*

Kent L. Gustafson and Robert Maribe Branch

This popular text, now in its fourth edition, provides readers with a solid understanding of the diversity and use of models used to portray the instructional development (ID) process, while reflecting the many changes in the field that have occurred since publication of the last edition in 1997.



Beginning with the belief that an ID model should be selected based on the specific context of the project, the authors present a classification schema for ID models that indicates whether a given model is best applied to developing individual classroom instruction, products for implementation by users other than the developers, or large and complex instructional systems directed at an organization's problems or goals.

Gustafson and Branch offer a schema that will help guide the way in which instructional development models are adopted or adapted. The authors also present a brief history of ID models, explore numerous examples from each of the three categories in the schema, and discuss the latest trends in instructional development affecting the use of ID models.

Kent L. Gustafson is Professor Emeritus of Instructional Technology at the University of Georgia and Past President of the Association for Educational Communications and Technology. He presents regularly at major educational conferences in America and in many countries around the world.

Robert Maribe Branch is Professor and Department Head of Instructional Technology at the University of Georgia. A former Fulbright Lecturer/Researcher, he currently serves as Senior Editor of the Educational Media and Technology Yearbook and consults regularly with businesses and government and educational institutions.

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## New ERIC Digests

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### **New Copyright Exemptions for Distance Educators**

[The Technology, Education and Copyright Harmonization \(TEACH\) Act](#)

By Carrie Russell

With the passage of a new law on November 2, 2002, eagerly-awaited by educators, teachers can now—in general—use the same types of copyright protected materials in the digital classroom that they would ordinarily use in the physical classroom. However, in order to take advantage of the exemptions, educational institutions must meet specific obligations outlined in the law. This ERIC Digest, written by the copyright specialist for the American Library Association's Office for Information Technology Policy, outlines both the privileges and the requirements of TEACH.

### **A New Framework for Teaching in the Cognitive Domain**

By Michael Molenda

For beginning lesson designers, this new ERIC Digest briefly describes M. David Merrill's "First Principles of Instruction," an important new conceptual framework for the design of lessons aimed primarily at cognitive learning. According to the author of this Digest, this new framework may provide the most comprehensive synthesis of instructional research and theory yet, and it more explicitly reflects the growing consensus that "meaning-making" is at the heart of cognitive learning. Michael Molenda, Associate Professor of Instructional Systems Technology at Indiana University, Bloomington, is co-author of the widely adopted text, *Instructional Media and Technologies for Learning*, 7th edition (Prentice-Hall, 2002).

### **Format Proliferation in Public Libraries**

By Norm Parry

Having to choose among the tens of thousands of new works published every year under the constraint of limited finances is not new to librarians; what is unprecedented is the number and kinds of choices librarians must make in response to the greater number of formats demanded by their customers. A list of available formats for a particular work might include hardcover, paperback, large print, foreign languages edition, audiocassette tape, book on CD, eBook, videocassette, and DVD. This new ERIC Digest examines some of the costs and challenges presented by the proliferation of formats and some strategies for addressing those challenges.

## Acquiring and Managing Electronic Journals

By Donnelyn Curtis and Paoshan Yue

Electronic journals are both a blessing and a curse for libraries, according to the authors of this new ERIC Digest. Librarians must acquire as many appropriate full text resources as possible, as quickly as possible, and make them easy to use in order to meet users' ever-increasing demands. Here readers will learn tips for acquiring and providing access to electronic journals through a library's Web site and online catalog. Includes an excellent list of Web sites and other resources for detailed advice on licensing and technical matters. Donnelyn Curtis, author of *Developing and Managing Electronic Journals Collections: A How-to-Do-It Manual for Libraries*, is the Director of Research Services and Paoshan Yue is the Electronic Resources Access Librarian at the University of Nevada, Reno Libraries.

## Why Should Principals Support School Libraries?

By Gary Hartzell

Beginning with a brief overview of the research which shows that—regardless of student, school and community demographics—quality library media programs enhance student achievement, this new ERIC Digest continues with an examination of how informed, committed school librarians can help principals enhance their own administrative practice as well as practical tips for principals on how they can support school libraries. A well-known advocate of school libraries, the author is a university professor and former high school principal.

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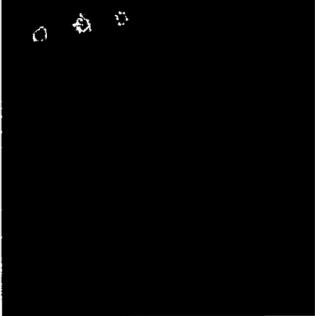
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